

Title (en)

High bearing pressure-resistant member and production process therefor

Title (de)

Hochdruckfestes Bauteil und dessen Herstellungsverfahren

Title (fr)

Elément résistant à la pression de palier élevée et procédé de sa fabrication

Publication

**EP 1070760 A3 20040324 (EN)**

Application

**EP 00115487 A 20000718**

Priority

- JP 20655299 A 19990721
- JP 20895899 A 19990723
- JP 2000204798 A 20000706

Abstract (en)

[origin: EP1070760A2] A high bearing pressure-resistant member used as a rolling element forming part of a toroidal continuously variable transmission for an automotive vehicle. The high bearing pressure-resistant member is formed of a mechanical structural steel containing Cr. The mechanical structural steel includes a matrix having at least one of martensite structure and bainite structure. The matrix contains carbide having a mean particle size of 3 μm or less, dispersed and precipitated in form of at least one of generally spheres and pseudo-spheres. <IMAGE>

IPC 1-7

**C21D 9/36; C21D 6/00; C23C 8/22; C23C 8/80; C21D 1/78**

IPC 8 full level

**F16H 55/06** (2006.01); **C21D 1/78** (2006.01); **C21D 9/32** (2006.01); **C21D 9/40** (2006.01); **C22C 38/00** (2006.01); **C22C 38/46** (2006.01); **C23C 8/22** (2006.01); **C23C 8/32** (2006.01); **C23C 8/34** (2006.01); **C23C 8/80** (2006.01); **F16C 19/10** (2006.01); **F16C 33/30** (2006.01); **F16C 33/62** (2006.01); **F16C 33/64** (2006.01); **F16H 15/38** (2006.01); **C21D 6/00** (2006.01); **C21D 9/36** (2006.01)

CPC (source: EP US)

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Citation (search report)

- [A] US 5650024 A 19970722 - HASEGAWA YASUSHI [JP], et al
- [A] US 4023988 A 19770517 - STICKELS CHARLES A, et al
- [XA] DATABASE WPI Section Ch Derwent World Patents Index; Class M27, AN 1973-74660U, XP002266058
- [XA] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 01 30 January 1998 (1998-01-30)

Cited by

EP2045339A1; GB2349647B; EP1156127A3; EP1512761A1; EP1837413A4; EP1258644A3; EP3705598A4; CN104160166A; CN111118272A; EP3591081A1; EP1452755A1; EP2514847A4; EP1985724A3; EP1455102A3; US7169238B2; US7682087B2; WO2013139514A1; WO2007014642A1; WO2005066383A1; WO2013139576A1; US8002907B2; US7490583B2; US7641742B2; US8066826B2; US7438477B2; US8425690B2; WO2006068205A1; US7334943B2; US7594762B2; US7744283B2; US8333516B2; US8783961B2; US9239080B2

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